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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.	
09.710,460	11-10-2000	Ken V. Pandya	206248	5210	
75	90 09.04.2002				
Leydig Voit & Mayer Ltd			EXAMINER		
Two Prudential 180 North Stets	Plaza Suite 4900 on	CINTINS, IVARS C			
Chicago, IL 60601-6780			ART UNIT	PAPER NUMBER	
			1724		

DATE MAILED: 09/04/2002

Please find below and/or attached an Office communication concerning this application or proceeding.

PTO-90C (Rev. 07-01)

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Office Action Summary

Application No. 09/710,460 Applicant(s)

Examiner

Art Unit 1724 **Ivars Cintins**



Pandya

	The MAILING DATE of this communication appears	on the cover she	et with	the correspondence address
Period	for Reply			
	HORTENED STATUTORY PERIOD FOR REPLY IS SET	TO EXPIRE	3	_ MONTH(S) FROM
	MAILING DATE OF THIS COMMUNICATION. Insigns of time may be available under the provisions of 37 CFR 1.136 (a). In a	no event however ma	v a reply b	e timely filed after SIX (6) MONTHS from the
mailir	ng date of this communication.			
- If NO	s period for reply specified above is less than thirty (30) days, a reply within th b period for reply is specified above, the maximum statutory period will apply a	ind will expire SIX (6) N	AONTHS fi	om the mailing date of this communication.
- Failur - Any i	re to reply within the set or extended period for reply will, by statute, cause th reply received by the Office later than three months after the mailing date of the	ne application to become his communication, eve	e ABANDO on if timely	SNED (35 U.S.C. § 133). filed, may reduce any
_	ed patent term adjustment. See 37 CFR 1.704(b).			
Status 1)	Responsive to communication(s) filed on			
	This action is FINAL . 2b) X This act			
2a).				are proposition as to the merits is
3)	Since this application is in condition for allowance e closed in accordance with the practice under Ex pair	rte Quayle, 193	i matte	11; 453 O.G. 213.
	sition of Claims			
4) X	Claim(s) <u>1-23</u>			is/are pending in the application.
	4a) Of the above, claim(s)			is/are withdrawn from consideration.
5)	Claim(s)			is/are allowed.
6) X	Claim(s) <u>1-23</u>			is/are rejected.
7):	Claim(s)	<u> </u>		is/are objected to.
8)				
Applic	eation Papers			
9)	The specification is objected to by the Examiner.			
10).	The drawing(s) filed on is/are	a) 🗌 accepted	or b)	objected to by the Examiner.
	Applicant may not request that any objection to the d			
11)		is:	a)	approved b) \square disapproved by the Examiner.
	If approved, corrected drawings are required in reply t			
12)	The oath or declaration is objected to by the Exami	iner.		
Priorit	y under 35 U.S.C. §§ 119 and 120			
13)	Acknowledgement is made of a claim for foreign pr	riority under 35	U.S.C.	§ 119(a)-(d) or (f).
a)	All b) Some* c) None of:			
	1. Certified copies of the priority documents hav	e been received	i .	
	2. Certified copies of the priority documents hav	e been received	l in Ap p	olication No
	3. Copies of the certified copies of the priority de application from the International Bure.			eceived in this National Stage
* (See the attached detailed Office action for a list of the	e certified copie	s not re	eceived.
14)	Acknowledgement is made of a claim for domestic	priority under 3	35 U.S.	C. § 119(e).
a)	ç ç .			
15)	Acknowledgement is made of a claim for domestic	priority under 3	35 U.S.	C. §§ 120 and/or 121.
	ment(s)	[]		2.440 B N. ()
, ,	Notice of References Cited (PTO-892)			D-413) Paper No(s)
	Notice of Draftsperson's Patent Drawing Review (PTO-948)		rmal Paten	t Application (PTO-152)
3) I	Information Disclosure Statement(s) (PTO-1449) Paper No(s).	6} Uther:		

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The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless
(b) the invention was patented or described in a printed publication in this or a foreign country or in public use or on sale in this country, more than one year prior to the date of application for patent in the United States.

Claims 1, 4-8, 17, 18, 21 and 22 are rejected under 35

U.S.C. 102(b) as being clearly anticipated by Deutsch (U.S. Patent No. 482,436). See Fig. 2; page 1, lines 80-85 and 98-100; and page 2, lines 1-2.

Claims 1, 4, 5, 17, 18, 21 and 22 are rejected under 35 U.S.C. 102(b) as being clearly anticipated by Weis et al. (U.S. Patent No. 3,730,348). See Fig. 2.

The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negatived by the manner in which the invention was made.

Claims 2, 3, 9, 10, 19 and 23 are rejected under 35 U.S.C. 103(a) as being unpatentable over Deutsch. The reference discloses the claimed invention with the exception of the

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geometric orientation of the orifices in the tube (claims 2 and 3), and the ratio of the total orifice area to the total screen open area (claims 9, 10, 19 and 23). However, the exact geometric orientation of the orifices in the reference tube, and the exact ratio of the total orifice area to the total screen open area in this reference system are not seen to materially affect the overall operation of the reference system, or to produce any new and unexpected result; and are therefore deemed to be obvious matters of choice in design, insufficient to patentably distinguish the claims.

Claims 2, 3, 6-10, 19 and 23 are rejected under 35 U.S.C.

103(a) as being unpatentable over Weis et al. The reference discloses the claimed invention with the exception of the geometric orientation of the orifices in the tube (claims 2 and 3), the shape of the screen (claims 6-8), and the ratio of the total orifice area to the total screen open area (claims 9, 10, 19 and 23). However, the exact geometric orientation of the orifices in the reference tube, the exact shape of the screen in this reference system, and the exact ratio of the total orifice area to the total screen open area in this reference system are not seen to materially affect the overall operation of the reference system, or to produce any new and unexpected result;

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and are therefore deemed to be obvious matters of choice in design, insufficient to patentably distinguish the claims.

being unpatentable over Duden (U.S. Patent No. 1,784,893) in view of Deutsch or Weis et al. Duden discloses an ion exchange system comprising an upper manifold, and a lower manifold with distribution nozzles. Accordingly, this primary reference discloses the claimed invention with the exception of the type of nozzle recited. Deutsch and Weis et al. disclose nozzles of the type recited; and it would have been obvious to one of ordinary skill in the art at the time the invention was made to substitute the nozzles of either secondary reference for the nozzles in the primary reference, since these secondary reference nozzles are capable of distributing and/or collecting a fluid in substantially the same manner as the nozzles of the primary reference, to produce substantially the same results.

claim 11 is objected to as being dependent upon a rejected base claim, but would be allowed if rewritten in independent form to include all of the limitations of the base claim and any intervening claims.

Hart et al. (U.S. Patent No. 5,545,319) shows an ion exchange system having a similar liquid distributor (see Fig. 9).

Page 5 Serial Number: 09/710,460 Art Unit: 1724 Any inquiry concerning this communication or earlier communications from the examiner should be directed to I. Cintins whose telephone number is (703) 308-3840. The examiner can normally be reached on Monday through Friday from 8:30 AM to 5:00 . Mi The fax phone numbers for this art unit are: (703) 872-9311 for "Official" faxes after Final Rejection; (703) 872-9310 for

all other "Official" faxes; and (703) 872-9492 for "Draft" and other "Unofficial" faxes.

Any inquiry of a general nature or relating to the status of this application should be directed to the Group receptionist whose telephone number is (703) 308-0661.

> Ivars C. Cintins **Primary Examiner** Art Unit 1724

I. Cintins September 2, 2002